

United States



of America.

Commonwealth of Massachusetts.

Boston, }
Suffolk, } ss.

ON this *fifth* _____ Day
of *June*, in the year of our Lord
one thousand eight hundred and *thirteen*
before me, WILLIAM STEVENSON, Notary Public, by
legal authority admitted and sworn, and dwelling in Bos-
ton aforesaid, and a Justice of the Peace for the County
of Suffolk, personally appeared *Jacob Perkins* and
acknowledged the Instruments of writing
hereunto annexed, by him signed and sealed,
to be his free act and deed - to wit *N^o 1.
2. 3 & 4*

Testimony whereof, I have hereunto set my
Hand, and affixed my Notarial Seal
the Day and Year first mentioned.

William Stevenson Notary Public.

J. J. P. P.

United States of America.

Commonwealth of Massachusetts.

City of Boston.

in the year of our Lord

one thousand eight hundred and

eighty one, WILLIAM STEVENSON, Mayor of the City of Boston, by

his authority admitted and sworn, and dwelling in the

County of Suffolk, and a Justice of the Peace for the County

of Suffolk, personally appeared

and acknowledged to me

the undersigned, a Justice of the Peace for the County

of Suffolk, that he is the author of the foregoing

instrument, and that he executed the same for the

purposes and for the consideration therein expressed.

Given under my hand and the seal of the County of Suffolk,

this

day of

in the year of our Lord

one thousand eight hundred and

eighty one.

Witness my hand and the seal of the County of Suffolk,

this

day of

in the year of our Lord

one thousand eight hundred and

eighty one.

Notary Public for the County of Suffolk.

My Commission expires the

day of

in the year of our Lord

one thousand eight hundred and

eighty one.

Notary Public for the County of Suffolk.

To all People to whom these Presents shall come, I
 Jacob Perkins of Newburyport in the County of Essex and
 Commonwealth of Massachusetts Gentleman,
 Send Greeting.

Whereas I the said Perkins have lately invented a
 new and useful improvement, being a Machine for making
 Sewing-Shanks; and certain Letters Patent in the name of
 the United States were on the twenty second day of March
 last past made out in due form of Law, granting to me
 the said Perkins and my heirs administrators or assigns for
 the term of fourteen years from the said twenty second day
 of March the full and exclusive right and liberty of making
 constructing, using, and vending to others to be used, the said
 improvement; a description whereof is contained in a certain
 Schedule annexed to the said Letters Patent:

Now Know Ye, that I the said Jacob Perkins, in con-
 sideration of Ten thousand Dollars —
 paid me by Francis C. Lowell of Boston in the County of
 Suffolk and Commonwealth aforesaid Merchant, the receipt
 whereof I do hereby acknowledge, Do by these Presents
 grant, bargain, sell, assign, transfer and convey, unto the
 said Francis C. Lowell and his heirs executors administrators
 and assigns, the aforesaid Letters Patent, and all my right, title,
 property and interest, in and to the said invention, and in and
 to the said Letters Patent which I have herewith delivered to
 the said Lowell: To have and to hold and receive the said

granted premises, and all the profit benefit and advantage whatsoever, that shall or may arise from making, constructing, using, or vending, the said improvement, unto the said Francis C. Lowell and his heirs executors administrators and assigns to his and their sole use forever. In Witness whereof I the said Jacob Perkins have hereunto set my hand and seal this tenth day of May in the year of our Lord one thousand eight hundred and thirteen.

Signed sealed and delivered
in presence of us

Sam. L. Abbot

W. Collins

Jacob Perkins

Dept. of State

Patent Office 11th June 1811

Recorded in the Book of Transfers of Patent rights
N^o. 1 fol. 392 & 393 the 11th day of June 1811—

Geo. Lyon

To all people to whom these presents shall come, I, Jacob Perkins, of Newburyport, in the County of Essex, and Commonwealth of Massachusetts, Gentleman,

Send Greeting.

Whereas I the said Perkins, have lately invented, a new, and useful improvement, (in Pumps, & certain Letters Patent in the name of the United States, were on the twenty third day of March last past, made out in due form of Law) granting to me the said Perkins, & my heirs, Administrators, or Assigns, for the term of fourteen years, from the said (twenty third day of March) the full & exclusive right & liberty of making, constructing, using, & vending to others, to be used, the said improvement; a description whereof is contained, in a certain Schedule annexed to the said letters patent:

Now Know ye, that I the said Jacob Perkins, in consideration of Two Thousand Dollars paid me by Francis C. Lowell of Boston, in the County of Suffolk, and Commonwealth aforesaid, Merchant, the receipt whereof I do hereby acknowledge. Do by these Presents grant, bargain, sell, assign, transfer, & convey, unto the said Francis C. Lowell, & his heirs, executors, administrators, & Assigns, the aforesaid letters patent, & all my right, title, property, & interest, in & to the said invention, & in & to the said letters patent, which I have herewith delivered to the said Lowell: To have & to hold & receive the said granted premises, & all the profit, benefit, & advantage whatsoever, that shall, or may arise, from making, constructing, using, or vending, the said improvement, unto the said Francis C. Lowell, & his heirs, executors, administrators & assigns, to his & their sole use forever. In witness whereof, I the said Jacob Perkins have hereunto set my hand, & seal this tenth day of May, in the year of our Lord, One thousand eight hundred, & thirteen.

Signed, Sealed, & Delivered,
in presence of us—

Sam^l L. Abbott

W. Rollins

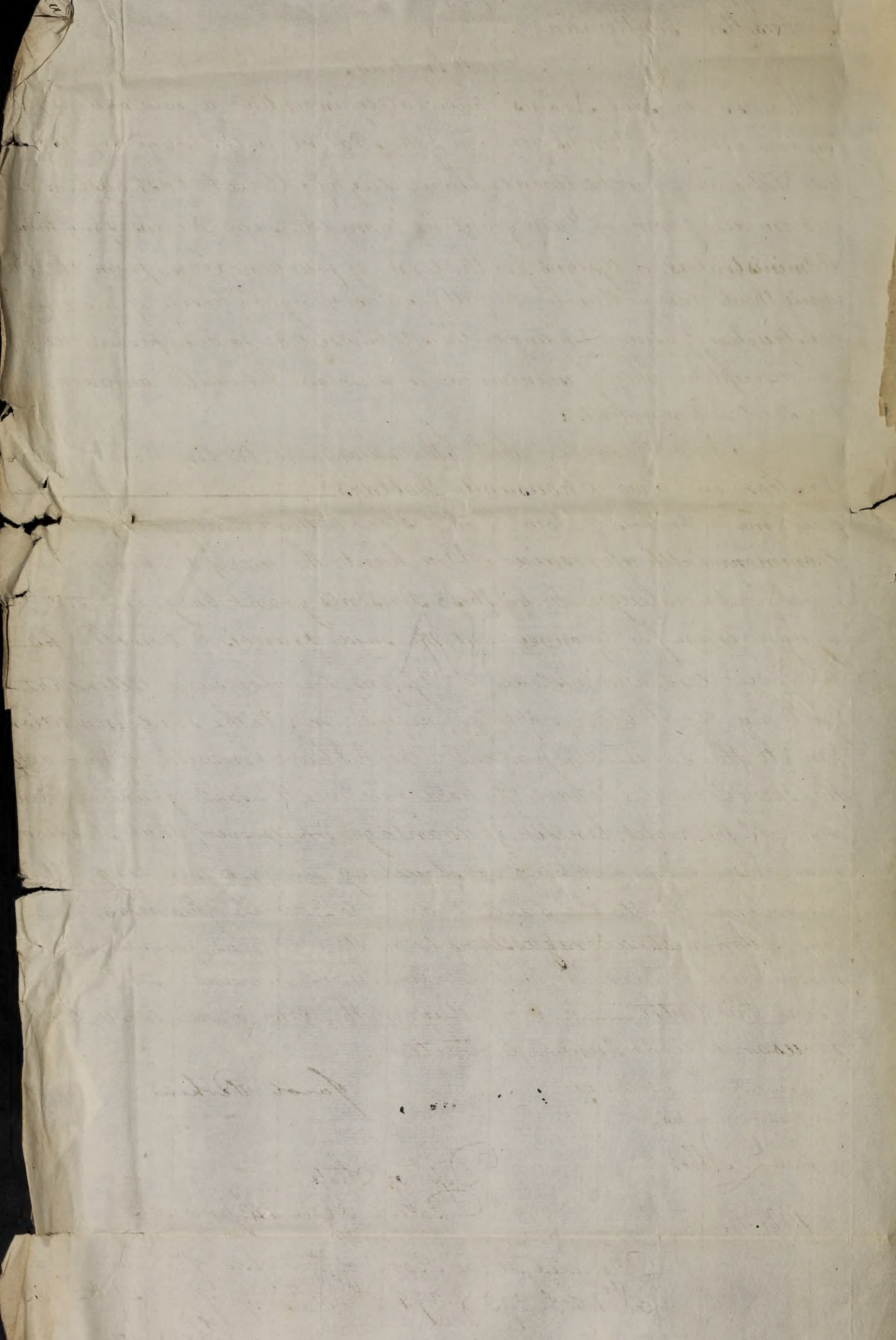
Jacob Perkins

Dep^t of State

Patent Office 14th June 1813

Recorded in the Book of transfers of Patent rights
N^o 1 fol^s 393 & 394 the 11th day of June 1813

Geo. Lyon



To all People, to whom these Presents, shall come, I Jacob Perkins, of Newburyport, in the county of Essex & commonwealth of Massachusetts, Gentleman.

Send Greeting.

Whereas, I, the said Perkins, have lately invented a new & useful improvement, in the Fire Engine; & certain letters patent, in the name of the United States, were on the twenty third day of March last past made out in due form of law, granting to me the said Perkins, & my heirs, administrators, or assigns, for the term of fourteen years from the said twenty third day of March, the full & exclusive right & liberty of making, constructing, using & vending to others to be used, the said improvement; a description whereof is contained in a certain schedule annexed to the said letters patent.

Now Know Ye, that I the said Jacob Perkins, in consideration of Two thousand and dollars ~~paid~~ paid me by Francis C. Lowell of Boston, in the County of Suffolk & commonwealth aforesaid, merchant, the receipt whereof I do hereby acknowledge. Do by these Presents, grant, bargain, sell, assign transfer & convey unto the said Francis C. Lowell & his heirs, executors, administrators & assigns, the aforesaid letters patent & all my right, title, property & interest, in & to the said invention & in & to the said letters patent, which I have herewith delivered to the said Lowell: To have & to hold & receive the said granted premises, & all the profit benefit & advantage whatsoever, that shall or may arise from making, constructing, using, or vending, the said improvement unto the said Francis C. Lowell, & his heirs, executors, administrators & assigns, to his & their sole use forever. In witness whereof I the said Jacob Perkins have hereunto set my hand & seal this tenth day of May in the year of our Lord, One thousand, eight hundred & thirteen.

Signed, Sealed, & delivered
in Presence of us.

Jacob Perkins

Sam^l L. Abbot

W. Rollins

Dept. of State

Patent Office 14th June 1813

Recorded in the Book of transfers of Patent Rights N^o. 1 fol. 394 & 395 the 11th day of June 1813

Geo: Lyon

[Faint, mostly illegible handwriting throughout the page, likely bleed-through from the reverse side.]

[Faint signature or name, possibly "James B. Smith".]

[Faint signature or name, possibly "John H. Smith".]

[Faint signature or name, possibly "John H. Smith".]

[Faint, mirrored handwriting at the bottom of the page, likely bleed-through from the reverse side.]

To all persons to whom these presents, shall come; at Jacob Perkins, of
Newburyport, in the County of Essex, & Commonwealth of Massachusetts, Greeting.

Whereas I the said Perkins, have lately invented a new useful improve-
ment being a vault lock for Banks; and certain letters patent, in the name of the Uni-
ted States were on the twenty third day of March last past made out in due form of Letters
granting to me the said Perkins, & my heirs, administrators, or assigns, for the term
of fourteen years, from the said twenty third day of March the full & exclusive right,
liberty of making, constructing, using, & vending to others to be used, the said improvement
a description whereof is contained in a certain schedule annexed to the said let-
ters patent:

Now Know Ye, that I, the said Jacob Perkins, in consideration
of Five Hundred dollars _____ paid me
by Francis C. Lowell of Boston, in the County of Suffolk, & Commonwealth of
Massachusetts, the receipt whereof I do hereby acknowledge, do by these presents, &
bargain sell, assign, transfer, & convey, unto the said Francis C. Lowell
his heirs executors, administrators, & assigns, the aforesaid letters patent, & all
right, title, property, & interest, in & to the said invention, & in & to the said letter
patent, which I have herewith delivered to the said Lowell: To have & to hold
receive the said granted, remises & all the profit, benefit, & advantage whatsoever
that shall, or may arise from making, constructing, using, or vending the said
improvement, unto the said Francis C. Lowell & his heirs executors, administrators
& assigns, to his & their sole use forever. In witness whereof I the said Jacob Perkins have
hereunto set my hand & seal this tenth day of June in the year of our Lords, One
thousand, eight hundred, & thirteen.

Signed, sealed & delivered
in presence of us.

Sam^l L. Abbott
(W. Collins)

Jacob Perkins

Dep^t of State

Patent Office 14th June 1874

Recorded in the Book of Transfers of Patent rights
N^o 1 for 3957-396 the 11th day of June 1874

Geo. Lyon

The United States of America,

To all to whom these letters Patent shall come,

Whereas Jacob Perkins a citizen of the United States
hath alleged that he has invented a new and
useful improvement in Pumps which improvement
he states has not been known or used before his applica-
tion; hath made oath that he does verily believe
that he is the true inventor or discoverer of the said
improvement; hath paid into the treasury of the Uni-
ted States the sum of Forty dollars, delivered a
receipt for the same and presented a petition to
the Secretary of State signifying a desire of obtaining
an exclusive property in the said improvement and
praying that a patent may be granted for that purpose
There are therefore to grant according to Law to the
said Jacob Perkins his heirs administrators or af-
fines for the term of fourteen years from the twenty-
third day of March 1813 the full and exclusive right

and liberty of making, constructing, using, and vending to others to be used the said improvement a description whereof is given in the words of the said Jacob Perkins himself in the schedule hereto annexed and is made a part of these presents.

In testimony whereof I have caused these letters to be made Patent and the seal of the United States to be hereunto annexed.

Given under my hand at the City of Washington this twenty third day of March in the year of our Lord one thousand eight hundred and thirteen and of the Independence of the United States of America the thirty seventh.

James Madison.

(By the President

James Monroe Secretary of State.

City of Washington. to wit.

I do hereby certify, that the foregoing Letters Patent

were delivered to me on the twenty third day of March in the year of our Lord one thousand eight hundred and thirteen to be examined: that I have examined the same and find them conformable to Law: and I do hereby return the same to the Secretary of State within fifteen days from the date aforesaid. to wit on this twenty third day of March in the year aforesaid

Wm. Pinkney { Attorney General of the
United States

The schedule refers to on these Letters Patent and on King, part of the same. containing a description in the words of the said Jacob Perkins himself of his improvements in Pumps.

The simple square pump the principal improvement of which is in the construction of the Boxes, is made out of common boards, rather and nails. The tube or trunk which is square is first begun, by having four strips of Board properly planed and jointed and then nailed together.

Before the first covering of boards is nailed on, tar
putting should completely cover the two sides where
the joints are men. Then another covering should be
nailed over the trunk observing at the same time to
break joints until the trunk is sufficiently strong to
withstand the pressure of the water, three thicknesses
will answer, for the pump of 6 inches diameter and
five thicknesses for one of eight inches diameter. The lower
box is formed of four pieces of board two of them square
and of a size sufficiently large to extend from one corner
of the pump to the other, having oblong pieces of
leather of about three times the length of the square
pieces of board placed between them when they are
firmly nailed together at the same time securing
 $2\frac{1}{2}$ of the leather to nail on separately the other two
pieces of board which form the valves and joints and
are of peculiar triangular form. This box when pla-
ced vertically in the pump, will when the tri-
angular valve opens form a light box, by falling

into the angles of the pump, which makes a bearing
for the valves, each valve having to open but about
20 degrees will work quicker than common valves
The upper box the Piston rod of which is made of a
strip of board sufficiently wide at the bottom, to extend
from one corner of the pump to the other has also an
eccentric triangular valve on each side and lifts the
column of water in the same way that the lower
box supports it. The Cyphon pump is made in the
following way. The body of this pump is made in the
way that common sheep pumps are excelling that
the lower box lies quite at the bottom of the pump the
upper box playing as near as possible, so that the cy-
phon may enter the pump as near above the upper
box as it will work. The cyphon which enters say
two feet from the bottom of the pump and is of the
same bore rises parallel with the pump with the
pump until it meets the dock where it forms a
right angle and with a gentle curve follows down

the inside of the ship where the water is delivered below
the surface of the ocean. The effect is that after the
water has been raised sufficiently high to charge the
cyphon, the water will fall in the pump until
it is level with the surface of the ocean. of course
it will be necessary to raise the water but a little
higher in the pump than the outside surface to
make it work and should the vessel be under way
the pressure will be partly^{ial} taken off from the end
of the short leg of the cyphon and the water
will fall in the pump, in proportion to the velocity
with which the vessel sails. In some cases the
water will only be raised from 2 to 3 feet in the
pump when without the cyphon it would be
necessary to raise it from 15 to 20 feet.

Witnesses William Thornton

Jacob Perkins

Geo: Lyon

A true Copy

Attest John Davis Clerk

To ^{Wm} Heath master of the Ship Union in
Charleston & Jacob Barwell
of Charleston Samuel B. Easley Greeting.

YOU are hereby required, in the name of the PRESIDENT OF THE UNITED STATES,
to make your appearance before the Judge of our ~~Common~~^{now} Court, ~~to be~~ holden at
~~Boston~~ within and for the District of Massachusetts, on the ~~twenty first~~
~~Day of May current~~ - to give evidence of what you know relating to
an Action or Plea of ~~the case~~ -
then and there to be heard and tried betwixt

Francis B Lowell - ~~Plf~~ &

Wm Lewis Defend

Hereof fail not, as you will answer your default under the Pains and Penalty in the Law
in that behalf made and provided. Dated at ~~Boston~~ the ~~twentieth~~
day of ~~May~~ - , in the year of our Lord 18 17

~~Wm Lewis~~ CLERK.

Supp. Ch. p. Boston May 20. 1817
I have summoned the within
named William Heath and Jacob
Casswell to appear as within
directed by read to them in their
presence & hearing this precept
and gave them seventy five cts
as fees for there attendance

Fees \$1.00
Extra trial 1.00
\$ 2.00

Jⁿ Bayley



Cash—
Paid Heath 75

\$ 6.25

Jⁿ Bayley

Supp. Ch. p. Boston May 21. 1817
I have summoned the within
named Sam^l B. Eds to appear
as within directed by reading
this precept in his presence &
hearing & gave him seventy five
cents in hand fees for attendance
Services 50.
P. J. B. Eds 75
\$ 1.25

~~not~~ ~~that the said~~ ~~plaintiff~~ ~~union~~ ~~in~~ ~~the~~ ~~city~~ ~~of~~ ~~Boston~~
To Samuel Hill mariner - William Lloyd seaman - Benjamin
Manning - Charles Wheeler - William Foster jr. William Austin
Daniel Adams - Stephen Shelton - Samuel Stebbins - Benjamin
Rich - Thomas Bignall - allan Colbrook Greeting Henry

~~that~~ ~~you~~ ~~are~~ ~~hereby~~ ~~required~~, in the name of the PRESIDENT OF THE UNITED STATES,
to make your appearance before the Judges of our Circuit Court, ~~to be~~ ^{now} holden at
Boston within and for the District of Massachusetts, on the twenty first
day of May current - to give evidence of what you know relating to
an Action or Plea of the case

then and there to be heard and tried betwixt

Francis C Lowell Plff. and
Winlow Lewis Defndt

Hereof fail not, as you will answer your default under the Pains and Penalty in the Law
in that behalf made and provided. Dated at Boston the twentieth
day of May - , in the year of our Lord 1817-

John Davis CLERK.

Suffolk Co. Boston May 21. 1817 I
have notified the within named Samuel
Hills, ~~William May~~, Benjamin Manning,
Charles Blake, William Foster & William Austin
Daniel Adams, Stephen Shelton, Samuel Stebbins
Benjamin Rich Thomas Bignall, Men
Pollock and Henry Fowle to appear
within directed by reading to them and
leaving a true and attested copy of
precept at there usual places of ab

fees \$6.00 -

Perk Dybl

Cash paid - 6-00

to Fowle & Manning - 1-50

\$ 7-50

Wm. Mayer

Chas Blake

Wm Foster Jr

A. Pollack

Dart Adams

Shelton

W. Thompson

Exchange

Wm. Davenport

W. B. Square

Nassau St

Canover St

Washington Place

Broad Street

Corn - 6th May 1818

Lowell Hff.

Lewis Depo^t

Deposits to costs

Atty fee - - - 2.50

Witnesses as
per certificates

25 days at 1.25 - 31.25

~~6.00~~
~~1.25~~

Attended - - - 2.64

3 subpoenas - 1.68

Lewis dep^t - 11.50

Record - 2.00

\$ 51.57

Sweating 20 Witnesses - 2.00

53.57

Costs taxable to Hffs.

Entry - - - 5.

Sweating 5 Witnesses. 0.50

5.50

1.68

2.

2.33

7.01



Corr. Court May Term 1817.

We the undersigned - summoned as witnesses to the Corr. Court of the United States May Term 1817 - in the action of Francis C Lowell against Winslow Lewis do hereby certify that we attended the number of days respectively set against our names and travelled the number of miles also respectively set against our names -

Saml Hill	2	Samuel B Edes	2
Wm Fortin	1	Thos. Baynall	2
William Austin	2	Daniel Adams	1
Michael Hopkins	1	Henry Fowle	1
Adam Pollock	1	Wm Ritchie	1
Wm Heath	2		
Jacob Caswell	2		
Robert Knox	1		
Benjamin Abenning	1		
B. W. W.	1		
Benj Clark	1		
Sam. Stebbins	1		
Thos. Shelden	2		
Thos. Parsons	1		
Charles Blake	1		

Lowell

W. Lewis

cont. &c.

Circuit Court of the United States - May. 1877
Lowell v Lewis -

And now the said Lewis comes to defend
to. whom to. & says he is not guilty of the
premises above stated in manner &
form as the Plff. has in his declaration
alleged against him & then puts him-
self upon the country by his attorneys

D. Webster & W. Sullivan.

and the Plff. likewise by J. J. Gordon

J. J. Gordon

44
1861

United States of America
District of Massachusetts

Pursuant to the within
precept I have duly summoned the within named
Charles Blake - William Austin & Samuel B. Edes
by leaving an attested copy of this subpoena at
each of their places of abode

Boston May 22 1817

Given — — —
3 H. Mays 1-50
3 Copies — 1-50
\$ 3.00

Attest W^m Kempton & J. Mearns

To Charles Blake - William Austin Samuel B
Eads - of Boston - - Greeting.

YOU are hereby required, in the name of the PRESIDENT OF THE UNITED STATES,
to make your appearance before the Judge of our ^{now} Circuit Court, ~~to be~~ holden at
Boston within and for the District of Massachusetts, on the *twenty second*
day of May current to give evidence of what you know relating to
an Action or Plea of *to Case*

then and there to be heard and tried betwixt

Francis Lowell. Plff &

William Lewis. Deft

Hereof fail not, as you will answer your default under the Pains and Penalty in the Law
in that behalf made and provided. Dated at *Boston the twenty first*
day of *May* - , in the year of our Lord 1817,

John W Davis CLERK.

Boston May 22. 1817

The jury find that the plaintiff has not
supported his declaration or set forth in
the writ - - and is not entitled to any
damages -

Jeremiah Peabody Sumner

The jury find that the Defendant is not guilty
in manner & form as the Jt. hath declared against
him -

Jeremiah Peabody Sumner

Given 23. May 1817

Attest John Davis Clk.

1
Hear &

MASSACHUSETTS

PICT, ss.

The President of the United States of America

To the MARSHAL of our District of MASSACHUSETTS, or his Deputy---GREETING.

WE command you to attach the goods or estate of Winslow Lewis of Boston
~~now in said District~~ Shipchandee

in our District of Massachu-

setts, to the value of Three Thousand dollars,
and for want thereof to take the body of the said Winslow
(if he may be found in your District) and him safely keep, so that you have him
before our judges of our Circuit Court of said United States for the first circuit next to be
holden at Boston, within and for our said District of Massachusetts, on the fifteenth
day of May next: Then and there, in our said court, to answer unto

Francis C. Lowell of said Boston merchant in a plea of case for
that whereas by certain letters patent, duly issued in the name of the United States
of America by the Secretary of State bearing date by the President of the United States
on the twenty third day of March Aughteen hundred & thirteen, him Lewis
to be produced was granted to ~~the said~~ Perkins his heirs & assigns for the space
of fourteen years from the said date the full & exclusive right & liberty of making
constructing using and vending to others to be used a new useful improvement
in pumps agreeably to a statute of the Congress of the United States made
Specified the 21 day of February AD 1798 entitled "an act to promote
the Progress of the useful arts & to repeal the act heretofore made for
that purpose", now the said Perkins says that Lewis is in no wise concerned
in the same and said Perkins after ward on the tenth day of May
Domini 1813 by his deed of that date duly executed & recorded in the office
of the Secretary of State of said State ~~the said~~ Burgess sold & assigned & set over to said
Lewis the said

three thousand dollars, which shall then and there be made
Lewis his heirs either due damages. And have you there this writ, with your doings therein.

Esq.; at Boston, the fifteenth

letters patent & about in the year of our Lord, one thousand eight hundred and seventeen

John Davis Clerk.

44
Lowell & Lewis

United States of America
District of Massachusetts

Comman to His Honor Joseph
I attached a notice to the property of the within named Lewis,
& delivered it to his dwelling house on Wednesday, nearly
full days before the time appointed for holding of the
Court
Witness my hand April 15th 1847

Fris	2
Exy	1.50
	3.50

James Prince Jr.
Deputy Marshall

J. G. Gorham

...invention and improvements designed the aforesaid
...his the said Perkins right to the property
...said new and useful invention improvement

Yet the said ~~part~~ in no wise ignorant of the Premises
but contriving in this behalf to injure herein the said Lowell
& deprive him of the benefit of said patent & invention, after
having on the first day of June last past done divers other things &
things between the said first day of June & the day of the pre-
sents ^{without the said consent of Perkins or Lowell or their assigns}
chase of this writ did ^{make} divers ^{use} ~~use~~ & sell
~~secondary persons upon the premises~~ ^{the} ~~improvement made~~
secured as aforesaid by said letters patent to said Perkins &
by him assigned as aforesaid to S. Lowell, contrary to the forms
of the Statute in that behalf made and

And also for that whereas one Jacob Perkins before and
at the time of issuing the letters patent hereafter mentioned
had discovered and invented a new and useful
improvement in pumps which is described and
set forth in the said letters patent ~~hereafter~~
and whereas by certain letters patent duly issued in
the name of the United States of America by the
Secretary of State bearing title by the President
of the United States and dated the twenty third
day of March A. eighteen hundred and thirteen
and in conformity to the produced was granted to
said Jacob Perkins his heirs and assigns for the space of
fourteen years from the said date the full and exclu-
sive right and liberty of making constructing using
and vending to others to be used a new and useful im-
provement in pumps agreeably to a statute of the Con-
gress of the United States made and passed the twenty
first day of February A. 1798 entitled "an act to promote
the progress of the useful arts and to repeal the act
heretofore made for that purpose" and said Per-
kins afterwards viz on the tenth day of May A. 1813 by
his deed of that date duly executed and recorded in the
office of the Secretary of State and in conformity to the
produced granted bargained sold and assigned and
set over to said Lowell his heirs executors administra-
tors and assigns the aforesaid letters patent and his the said
Perkins' right, title, property, and interest in the said new
and useful invention and improvement yet the said
Lewis in no wise ignorant of the premises but contriving
in this behalf to injure him the said Lowell and deprive him
of the benefit of said patent and invention and the assignment
thereof afterwards viz. on the first day of June last past and
on divers other days and times between the said first day
of June and the day of the purchase of this writ did, with the
consent of the said Perkins or said Lowell or their assigns, make
device and sell divers viz two hundred ^{pumps} valves and pistons constructed
upon the principle of the improvement and invention of said Perkins
secured to him by said letters patent as aforesaid and contrary to the
form of the statute aforesaid in such case made specified

And also for that whereas one Jacob Perkins before, at the time of issuing the
letters patent, hereafter mentioned had discovered & invented a new & useful
improvement in Pumps which is described & set forth in the letters
patent & whereas by certain letters patent duly issued in the name of the
United States of America by the Secretary of State bearing teste by the
President of the United States & dated the twenty third day of March
A.D. eighteen hundred & thirteen in Court to be produced was granted
to one Jacob Perkins his heirs & assigns for the space of fourteen years from
the said date the full & exclusive right & liberty of making construe-
ting using & vending to others to be used a new & useful improvement
in pumps agreeably to a Statute of the Congress of the United States
made & past the 21st day of February A.D. 1798 entitled an act
to promote the progress of useful arts & to repeal the act heretofore
made for that purpose & said Perkins after wards viz on the tenth
day of May A.D. 1813 by his deed of that date duly executed and
recorded in the office of the Secretary of State & in Court to be pro-
duced granted bargained sold assigned & set over to said Lowell, his
heirs executors administrators & assigns the aforesaid letters patent
& all his the said Perkins right title interest & property in the
said new & useful invention & improvement - yet the said Lewis
in nowise ignorant of the Premises but contriving in this behalf
to injure him the said Lowell & deprive him of the benefit of
said patent & invention & the assignment thereof afterwards viz on
the first day of June last past & on divers other days & times be-
tween the said first day of June & the day of the purchase of
the writ did without the consent of said Perkins or Lowell or
their assigns make devise & sell divers viz two hundred
pump valves & pistons constructed in part upon the

principle of the improvement & invention of Sam Perkins se-
cured to him by Sam Allen's patent as aforesaid & contrary to the
form of the Statute ~~of the~~ ^{in which} can made specific to

New South

A

Tied on Count 21. May
1817 with John D. W.

Francis E. Lowell of Boston in the Dist. of Mass. vs.
Wendell, plff vs. Winslow Lewis of s.^d Bath, Thos Chandler,
Defdt. in a plea of the case for that dec. (see Unit) as for
as "Gallars" -) - This Act was commenced at this present Term
And now the s.^d Lewis dec. (see Pleas) by his Attys Daniel
Webster & George Sullivan comes dec. (see Pleas except signatures)
I now being thus joined, the cause after a full hearing, is
committed to a Jury sworn accordg to law to try the same,
who, after hearing all matters & things concg. the same, return
their verdict therein upon oath, that is to say - (s.^d Verdict ex-
cept signature.) It is therefore consid^d by the Ct.
that the s.^d W. L. the Defdt recover agt the s.^d F. E. L
the plff Costs of suit Taxed at \$53..57

Exon comes
27. May 1817

Marg: Tit.

Lowell
vs.
Lewis

The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the structure of the atom is determined by the laws of quantum mechanics.

The United States of America

To all to whom these Letters Patent shall come,

Whereas James Baker a citizen of the United States hath alleged that he has invented a new and useful improvement entitled the Elliptic Valve pump box which improvement he states has not been known or used before his application hath made oath that he does verily believe that he is the true inventor or discoverer of the said improvement hath paid into the Treasury of the United States the sum of Thirty dollars delivered a receipt for the same and presented a petition to the Secretary of State signifying a desire of obtaining an exclusive property in the said improvement and praying that a Patent may be granted for that purpose: There are therefore to grant according to Law to the said James Baker his heirs administrators or assigns for the term of fourteen years from the month

day, of May, One thousand eight hundred and
seventeen the full and exclusive right and liberty
of making, constructing, using, and vending, to others
to be used the said improvement - a description
whereof is given in the words of the said James
Baker himself in the Schedule hereto annexed,
and is made a part of these presents

In testimony whereof I have caused this
Letter to be made patent and the seal of the
United States to be hereunto affixed.

Given under my hand at the City
of Washington this ninth day of May,
in the year of our Lord one thousand
eight hundred and seventeen and of
the independence of the United States
of America the forty first.

James Monroe

By the President

Richard Rush acting Secretary of State

City of Washington to wit:

I do hereby, Certify, that the foregoing Letters Patent
were delivered to me on the ninth day of May, in the
year of our Lord one thousand eight hundred and
seventeen to be examined that I have examined the
same and find them conformable to law, and I do
hereby return the same to the Secretary of State within
fifteen days from the date aforesaid. As wit on this
ninth day of May, in the year aforesaid

Richard Rush Attorney General of the
United States.

The Schedule referred to in these Letters Patent
and making part of the same containing a
description in the words of the said James Baker
himself of his improvement entitled the "Elliptic Valve
Pump box." This improvement consists in the shape
of the box and structure and operation of the valves,
whereby, a larger passage for a fluid from the bot-
tom of the pump to and above the lifting box is

given and the effect of raising the fluid is produced more rapidly, with the application of the same power in the same time.

The box is made of copper or other metal or metallic composition and is formed from a section of a hollow cylinder, cut at one end somewhat in the form of a wedge. To get the idea of this form take a hollow cylinder, whose length is equal to two thirds of its diameter, and beginning at opposite points at one extremity, thereof cut the cylinder, from said points inwards, at an angle of about 45° with the axis of the cylinder, until the sectional lines meet. Thereof the interior, of the Box where these lines meet - is a crop piece of the whole depth of the box at said points thus dividing the whole box into two equal parts by a substantial partition wherein are made holes from top to bottom for the staple rods in the cylinder, and staple rods and valve bolt in the lower box which in the usual form pass through the same and are firmly

secured, by nuts at the bottom. On the superior surface of the partition is cut a channel wherein the leather of the valves is pressed by a plate in the lower box, and the shoulders of the staple rods on the upper box. The substance of the partition and of the periphery of the box should be as thin as may be consistent with requisite strength. The valves are formed of a piece of leather, in elliptic form secured to the partition at the conjugate or shorter axis of the valve, so that the leather, lays upon and covers both passages in the box and extends over the edges thereof a quarter or half inch as may be most convenient. To the under and the upper side, of each half are affixed a piece of copper or brass or other metal or composition of metals nearly as large as the orifice of the passages respectively, and placed on the leather and connected with each other by screws passing through each and the leather between them in such manner that the leather of the valve comes in contact with the upper edge of the

box and thereby the valve closes water tight ~~water tight~~
upon the box. The leather of the valve that projects
beyond the box prevents the escape of the fluid between
the box and the sides of the bore or chamber of the pump
so that when the lifting box ascends none of the fluid escapes
either through or by the sides of the box and when in
the act of descending, the two parts of the valve, rise or
are thrown up to the center against the staple rods and
close the two passages or orifices of the bore. The valve of
the lower box operating in the same manner opens
as the lifting box ascends and are closed as the lifting
box descends. Reference is here by given to the models
deposited with the department of State. The specific
object for which a patent is obtained is the peculiar struc-
ture of the valve or valves and of the box particularly
that form of the box which keeping the valves up
so that in operation they have but little movement
to perform. In testimony that the above is a true

specification of my said improvements I have here-
to set my hand and seal the twenty fifth day of
April in the year of our Lord Eighteen hundred and sev-
teen

James Barker

Witnesses

W. Stevenson of Boston

Walter A. Barker of Boston

I True Copy

Attest, Willm. Davis Clerk.

Copy of Barker's
letter

To all to whom these Patents shall come Greeting,

I certify that the following is a true copy of a patent granted to Jacob Perkins for an improvement in pumps dated March 23^d 1813.

In testimony whereof I Richard Rush acting Secretary of State of the United States have hereunto subscribed my name and caused the seal of the Department of State to be affixed.

Done at the City of Washington this 20th day of March A.D. 1813
Richard Rush.

The United States of America,

To all to whom these letters patent shall come,

Whereas Jacob Perkins a citizen of the United States hath

alleged that he has invented a new and useful improvement in pumps which improvement he states has not been known or used before his application; hath made oath that he does verily believe that he is the true inventor or discoverer of the said improvement hath paid into the Treasury of the United States the sum of Thirty Dollars, delivered a receipt for the same and presented a petition to the Secretary of State signifying a desire of obtaining an exclusive property in the said improvement and praying that a patent may be granted for that purpose There are therefore to grant according to law to the said Jacob Perkins his heirs administrators or assigns for the term of fourteen years from the twenty third day March one thousand eight hundred and thirteen the full and exclusive right and liberty of making constructing using and vending to others to be used the said improvement a description

whereof is given in the words of the said Jacob Perkins himself in the schedule hereto annexed and is made a part of these presents

In testimony whereof I have caused these letters to be made Patent and the Seal of the United States to be hereunto affixed

Given under my hand at the City of Washington this 23 day of March in the year of our Lord one thousand eight hundred and thirteen and of the independence of the United States of America the thirty second

James Madison

By the President

James Monroe

Secretary of State

City of Washington To wit

I do hereby certify that the foregoing Letters Patent were delivered to me on the 23 day of March in the year of our Lord one thousand eight hundred and thirteen to be examined: that I have examined the

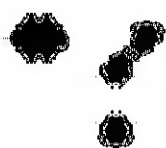
same, and find them conformable to law, and I do hereby return the same to the Secretary of State within fifteen days from the date aforesaid to wit on this 23^d day of March in the year aforesaid.

William P. Bennett, Attorney General
of the United States

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Jacob Perkins himself of his improvement in Pumps.

Specification of improvements in Ships Pumps one of which is so constructed as that the trunk and boxes may be made out of the materials commonly found on board ships. The other is a combination of the ciphon and the common pump together with the lateral effect of the water while passing the ships sides when under way, on the short leg of the ciphon. The simple square pump the principle

improvement of which is in the construction of the boxes, is made out of common boards leather and nails. The tube or trunk, which is square is first begun, by having four strips of board, properly planed and jointed and then nailed together, before the first covering of boards is nailed on, tarpaulining should completely cover the two sides, where the joints are seen. Then another covering should be nailed over the trunk, observing at the same time to break joints) until the trunk is sufficiently strong, to withstand the pressure of the water. Three thickneses will answer for a pump of 6 inches diameter, and five thickneses for one of 8 inches diameter. The lower box is formed of four pieces of ^{board}boards, two of them square, and of a size sufficiently large to extend from one corner of the pump to the other, having oblong pieces of leather of about three times the length of the square pieces of board placed between them when they are firmly nailed together; at the same time leaving



$\frac{1}{3}$ of the leather to nail on separately, the other two pieces of board, which form the valves and joints and are of an isocelus triangular form. This box when placed vertically in the pump will when the triangular valves open, form a tight box, by falling into the angles of the pump which makes a bearing for the valves each valve having to open but 20 degrees will work quicker than the common valves. The upper box the piston rod of which is made of a strip of board sufficiently wide at the bottom to extend from one corner of the pump to the other has also an isocelus triangular valve, on each side, and lifts the column of water in the same way that the lower box supports it. The ciphon pump is made in the following way. The body of this pump is made in the way that common ships pumps are made excepting that the lower box lies quite at the bottom of the pump the upper box playing as near it as possible, so that the ciphon may

enter the pump, as near above the upper box as it will work the ciphon which enters say two feet from the bottom of the pump and is of the same bore, rises parallel with the pump, until it meets the deck where it forms a right angle and with a gentle curve follows down the inside of the ship, where the water is delivered below the surface of the ocean. The effect is that after the water has been raised sufficiently high to charge the ciphon the water will fall in the pump until it is level with the surface of the ocean. ~~The~~ of course it will be necessary to raise the water but a little higher in the pump than the outside surface to make it work and should the vessel be under way the pressure will be partially taken of from the end of the short leg of the ciphon and the water will fall in the pump in proportion to the velocity with which the vessel sails. In some cases the water will only be raised from 2 to 3 feet in the pump, when without the ciphon

it would be necessary to name it from 15 to 20 feet

Jacob Perkins

Attest William Sherman
Geo: Rogers

A true copy

Attest Jacob Perkins

Copy of Perkins'
Patent